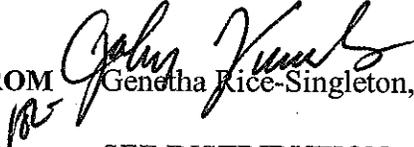


**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE** P. I. No. 0000684, Lowndes County **OFFICE** Preconstruction  
BR00-0000-00(684)  
CS 1191/Tucker Road over Dukes Bay Canal-  
Bridge Replacement **DATE** March 6, 2009

**FROM**  Genetha Rice-Singleton, Assistant Director of Preconstruction

**TO** SEE DISTRIBUTION

**SUBJECT APPROVED REVISED PROJECT CONCEPT REPORT**

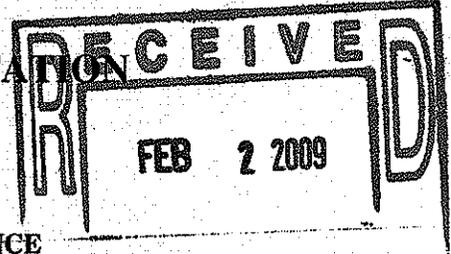
Attached for your files is the approval for subject project.

Attachment

**DISTRIBUTION:**

Ron Wishon  
Glenn Bowman  
Ken Thompson  
Michael Henry  
Keith Golden  
Joe Sheffield  
Paul Liles  
Brent Thomas  
Sandy Griffin  
BOARD MEMBER

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA



INTERDEPARTMENT CORRESPONDENCE

**FILE** BR000-0000-00(684), Lowndes County      **OFFICE** Tifton, GA  
PI No. 0000684      **DATE** January 8, 2009  
Bridge Replacement on CS 1191/Tucker Rd.  
@ Dukes Bay Canal

**FROM**   
Ralph S. Griffin, District Design Engineer

**TO** Genetha Rice - Singleton, Assistant Director of Preconstruction

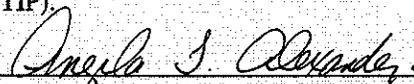
**SUBJECT** Revised Project Concept Report

Attached is the original copy of the Revised Concept Report for your further handling for approval in accordance with the Plan Development Process.

Because the project has a small drainage area and the next structure downstream is a culvert, the existing bridge is going to be replaced with a culvert instead of a new bridge. By doing this, there will be a significant decrease in total project cost and impacts. Also, by choosing to replace the bridge with a culvert, we will be able to utilize the existing alignment.

The revised concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Program (RTP) and/or State Transportation Improvement Program (STIP).

Date 1-29-2009

  
State Transportation Planning Administrator

RSG:tab

Attachment

CC:

Ron Wishon, Acting Project Review Engineer - Engineering Services  
Glenn Bowman, State Environmental/Location Engineer  
Keith Golden, State Traffic Safety and Design Engineer  
Angela T. Alexander, State Transportation Planning Administrator  
Angela Whitworth, Financial Management Administrator  
Paul Liles, State Bridge Design Engineer

# Revised Project Concept Report

## NEED AND PURPOSE

The existing bridge on CS-1191/Tucker Road, located immediately south of Valdosta and connecting SR-31/Madison Hwy (on the west) to SR-7 (on the east), carried an average of 800 vehicles per day (vpd) in the year 2004, which included school bus traffic. This traffic volume represents a Level-of-Service "A", which is acceptable. This two-lane bridge was constructed in 1955 and is not on a state or locally designated bike route.

The substructure condition rating for the bridge is a 1, and the sufficiency rating is 27.25. In accordance with GDOT MOG 2405-1, a substructure condition appraisal rating of 4 or less and a sufficiency rating less than 50 requires the bridge to be replaced. Therefore, this bridge meets the policy for replacement.

For the year 2010 (no build), traffic volumes are projected to be 950 vpd, and in 2030 (no-build) it is projected to be 1,500 vpd. For both scenarios the Level-of-Service will be "A", which is acceptable.

Because the bridge is considered structurally deficient, GDOT has proposed project BR000-0000-00(684) to replace the existing bridge with a new structure. This project does not disproportionately burden or benefit any particular community. The land use within the project's vicinity is commercial and residential. Within the project's vicinity, there are two census tracts, CT 13185010800 and CT 13185011402. The minority population in 2000 (for census tract 13185010800) was 91.40%, and for 46.99% for CT013185011402. In 2000, the minority population for the state of Georgia was 34.9% and for Lowndes County minorities accounted for 38% according to the 2000 Census Data.

The project is considered to benefit to all of the communities that use this bridge for their daily commute.

### Description of the project:

This project is the replacement of the narrow and structurally deficient bridge on City Street 1191/Tucker Road at Dukes Bay Canal approximately 1.5 miles southwest of Valdosta, Georgia, in the 11<sup>th</sup> Land District, Land Lot No. 78, and 109; this is located in Georgia Militia District 663. The proposed project will be approximately 0.43 miles in length.

Is the project located in a Non-attainment area? Yes  No

PDP Classification: Major  Minor

Federal Oversight: Full Oversight  Exempt  State Funded  or Others

Functional Classification: Urban Collector Street

U. S. Route Number(s): N/A

State Route Number(s): N/A

Traffic (AADT):

Base Year: (2010) 950

Design Year: (2030) 1500

**Proposed Features to be Revised:**

The original approved concept described the project as the replacement of the structurally deficient bridge on CS 1191/Tucker Road over Dukes Bay Canal with a new reinforced concrete bridge. Based on the hydrologic and hydraulic studies, it was determined that the existing bridge is to be replaced with a Double Barrel 10 foot by 11 foot culvert. The proposed culvert will be buried two feet to follow fish passage requirements, so it will function as a Double Barrel 10 foot by 9 foot culvert. The culvert will be 79 feet long and will be skewed 75 degrees to the centerline of the roadway. As a result of choosing to replace the bridge with a culvert, the total cost of the project and impacts will be significantly reduced. The project length will also be shortened from 0.43 miles to 0.085 miles allowing the existing alignment to be utilized. By reducing the length of the project we will be able to avoid impacts to the existing perpendicular railroad crossing and railroad rights-of-way which will eliminate the need for railroad involvement. The proposed typical section will remain the same as shown in the original concept report except for the addition of approximately 200 LF of paved shoulder with asphalt curb to channel stormwater away from the two existing longitudinal streams. The stormwater will be captured in drainage structures and piped to a special ditch which will be used as a grass channel treatment chain to remove 80% of Total Suspended Solids and satisfy the requirements for the required stream buffer variances.

**Programmed/Schedule:**

P.E. 11/27/2000 R/W: Local Construction: Approved 2010, Proposed 2011

VE Study Required Yes ( ) No (X)

**Revised Cost Estimate:**

Construction including E & C and Fuel Price Adjustment...\$673,429.08  
R/W.....\$165,100.00 (Locals)  
Utility.....Local

Is the project in a Non-Attainment Area? Yes ( ) No (X)

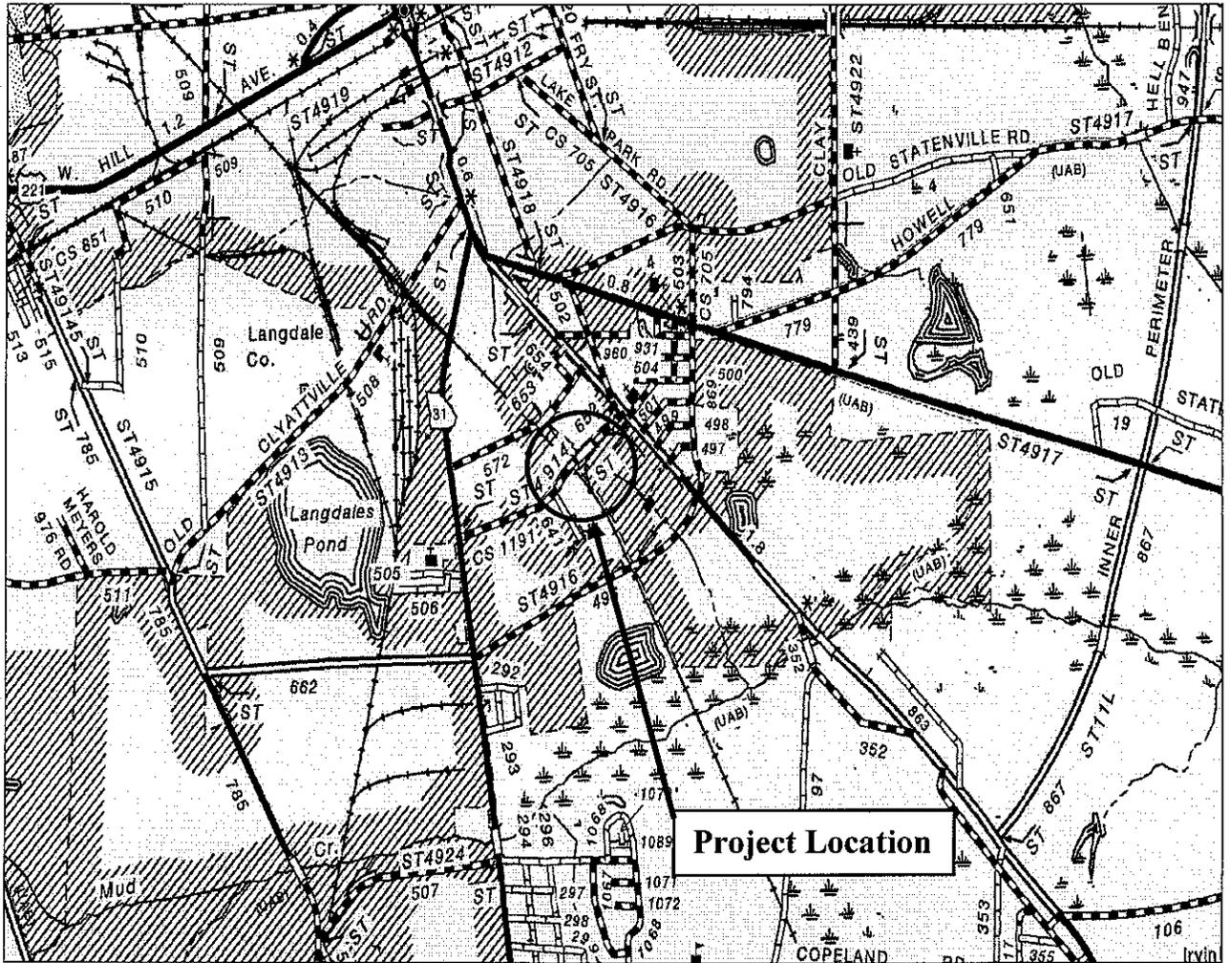
**Recommendation:** This office recommends that the proposed revision to the concept report be approved for implementation.

**Attachments:** Location Map  
Cost Estimate

Concur: *Dorothy Rice-Sykes* <sup>Inspector</sup>  
Director of Preconstruction

Approve: *Dale QMR*  
Chief Engineer

# LOCATION MAP



**PI Number.:** 0000684  
**Project Number:** BR000-0000-00(684)  
**Project Description:** Bridge replacement on City Street 1191/Tucker Road  
@ Dukes Bay Canal in South Valdosta

# DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

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INTERDEPARTMENT CORRESPONDENCE

**FILE** PROJECT No. BR000-0000-00(684), Lowndes  
Bridge Replacement on CS1191/Tucker Rd at  
Dukes Bay Canal  
P.I. No. 0000684

**OFFICE** District 4 Design

**DATE** 2/25/2009

**FROM** Ralph S. Griffin, District 4 District Design Engineer

**TO** Ronald E. Wishon Acting Project Review Engineer

**SUBJECT** REVISIONS TO PROGRAMMED COSTS

PROJECT MANAGER Ralph S. Griffin

MNGT LET DATE July 2010

MNGT R/W DATE July 2009

**PROGRAMMED COST (TPro W/OUT INFLATION)**

**LAST ESTIMATE UPDATE**

CONSTRUCTION \$673,429.08

DATE 1/13/2009

RIGHT OF WAY \$165,100.00

DATE 1/13/2009

UTILITIES Local Government

DATE Select Date

**REVISED COST ESTIMATES**

CONSTRUCTION\* \$680,286.97

RIGHT OF WAY \$165,100.00

UTILITIES\*\* Local Government

\* Costs contain 5% Engineering and Inspection and 3% Construction Contingencies and Fuel and Liquid AC Adjustments.

\*\* Costs contain 0% contingency.

**REASON FOR COST INCREASE** Updated to include additional permanent erosion control.



## Estimate Report for file "0000684"

### Section ROADWAY

Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	Lump	LS	15000.00	TRAFFIC CONTROL - BR000-0000-00(684)	15000.00
210-0100	Lump	LS	100000.00	GRADING COMPLETE - BR000-0000-00(684)	100000.00
310-5080	642	SY	25.00	GR AGGR BASE CRS, 8 INCH, INCL MATL	16050.00
402-1812	168	TN	67.37	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	11318.16
402-3101	93	TN	98.00	RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TYPE I, BLEND 1, INCL BITUM MATL & H LIME	9114.00
402-3190	71	TN	79.00	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	5609.00
413-1000	87	GL	2.25	BITUM TACK COAT	195.75
436-1000	439	LF	8.14	ASPHALTIC CONCRETE CURB -	3573.46
550-1180	365	LF	39.50	STORM DRAIN PIPE, 18 IN, H 1-10	14417.50
550-4218	1	EA	650.85	FLARED END SECTION 18 IN, STORM DRAIN	650.85
634-1200	4	EA	201.00	RIGHT OF WAY MARKERS	804.00
641-1100	84	LF	42.61	GUARDRAIL, TP T	3579.24
641-1200	100	LF	24.95	GUARDRAIL, TP W	2495.00
641-5001	2	EA	759.00	GUARDRAIL ANCHORAGE, TP 1	1518.00
641-5012	2	EA	1905.00	GUARDRAIL ANCHORAGE, TP 12	3810.00
668-1100	3	EA	3500.00	CATCH BASIN, GP 1	10500.00
668-2100	2	EA	2475.00	DROP INLET, GP 1	4950.00
668-2110	3	LF	350.50	DROP INLET, GP 1, ADDL DEPTH	1051.50
<b>Section Sub Total:</b>					<b>\$204,636.46</b>

### Section PERMANENT EROSION CONTROL

Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0527	5	EA	214.42	CONSTRUCT AND REMOVE RIP RAP CHECK DAMS, STONE PLAIN RIP RAP/SAND BAGS	1072.10
165-0041	100	LF	1.94	MAINTENANCE OF CHECK DAMS - ALL TYPES	194.00
603-2024	85	SY	55.00	STN DUMPED RIP RAP, TP 1, 24 IN	4675.00
603-2181	36	SY	39.40	STN DUMPED RIP RAP, TP 3, 18 IN	1418.40
603-7000	121	SY	5.25	PLASTIC FILTER FABRIC	635.25
700-6910	1	AC	1022.21	PERMANENT GRASSING	1022.21
700-7000	1	TN	59.99	AGRICULTURAL LIME	59.99
700-7010	3	GL	21.55	LIQUID LIME	64.65
700-8000	1	TN	294.72	FERTILIZER MIXED GRADE	294.72
700-8100	100	LB	2.50	FERTILIZER NITROGEN CONTENT	250.00
<b>Section Sub Total:</b>					<b>\$9,686.32</b>

### Section TEMPORARY EROSION CONTROL

Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	1	AC	1000.00	TEMPORARY GRASSING	1000.00
163-0240	8	TN	1220.00	MULCH	9760.00
163-0300	2	EA	1807.17	CONSTRUCTION EXIT	3614.34
163-0520	400	LF	24.00	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	9600.00
163-0528	120	LF	5.00	CONSTRUCT AND REMOVE FABRIC CHECK DAM - TYPE C SILT FENCE	600.00
163-0529	215	LF	8.00	CONSTRUCT AND REMOVE TEMPORARY SEDIMENT BARRIER OR BALED STRAW CHECK DAM	1720.00
165-0030	1125	LF	1.32	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	1485.00
165-0041	60	LF	5.00	MAINTENANCE OF CHECK DAMS - ALL TYPES	300.00
165-0071	108	LF	5.00	MAINTENANCE OF SEDIMENT BARRIER - BALED STRAW	540.00
165-0101	2	EA	790.00	MAINTENANCE OF CONSTRUCTION EXIT	1580.00
167-1000	2	EA	1692.56	WATER QUALITY MONITORING AND SAMPLING	3385.12
167-1500	18	MO	973.27	WATER QUALITY INSPECTIONS	17518.86
171-0030	2250	LF	5.29	TEMPORARY SILT FENCE, TYPE C	11902.50
<b>Section Sub Total:</b>					<b>\$63,005.82</b>

**Section SIGNING AND MARKING**

Item Number	Quantity	Units	Unit Price	Item Description	Cost
636-1033	300	SF	20.72	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9	6216.00
636-2070	112	LF	8.75	GALV STEEL POSTS, TP 7	980.00
652-5451	300	LF	0.26	SOLID TRAFFIC STRIPE, 5 IN, WHITE	78.00
652-5452	600	LF	0.22	SOLID TRAFFIC STRIPE, 5 IN, YELLOW	132.00
<b>Section Sub Total:</b>					<b>\$7,406.00</b>

**Section CULVERT NO. 1**

Item Number	Quantity	Units	Unit Price	Item Description	Cost
207-0203	145	CY	51.00	FOUND BK FILL MATL, TP II	7395.00
500-3101	316	CY	750.00	CLASS A CONCRETE	237000.00
511-1000	37167	LB	1.25	BAR REINF STEEL	46458.75
540-1101	Lump	LS	39000.00	REMOVAL OF EXISTING BR, STA NO 38+60.06	39000.00
<b>Section Sub Total:</b>					<b>\$329,853.75</b>

**Total Estimated Cost: \$614,588.35****Subtotal Construction Cost \$614,588.35**

E&amp;C Rate 5.0 % \$30,729.42

Contingency Rate 3.0 % \$18,437.65

**Total Construction Cost \$663,755.42**

Right Of Way \$165,100.00

ReImb. Utilities \$0.00

**Grand Total Project Cost \$828,855.42**

**Special Provision, Section 109-Measurement and Payment**  
**FUEL PRICE ADJUSTMENT (ENGLISH 125% MAX)**

ENTER FPL DIESEL	2.266
ENTER FPM DIESEL	5.099

ENTER FPL UNLEADED	1.812
ENTER FPM UNLEADED	4.077

<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

<b>INCREASE ADJUSTMENT</b>
125.00%

<b>INCREASE ADJUSTMENT</b>
125.00%

ROADWAY ITEMS	QUANTITY	DIESEL FACTOR	GALLONS DIESEL	UNLEADED FACTOR	GALLONS UNLEADED	REMARKS
Excavations paid as specified by Sections 205 (CUBIC YARD)		0.29		0.15		
Excavations paid as specified by Sections 206 (CUBIC YARD)		0.29		0.15		
GAB paid as specified by the ton under Section 310 (TON)	290.000	0.29	84.10	0.24	69.60	8" GAB
Hot Mix Asphalt paid as specified by the ton under Sections 400 (TON)		2.90		0.71		
Hot Mix Asphalt paid as specified by the ton under Sections 402 (TON)	332.000	2.90	962.80	0.71	235.72	
PCC Pavement paid as specified by the square yard under Section 430 (SY)		0.25		0.20		

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
Bridge Excavation (CY) Section 211				8.00		1.50		
Class __ Concrete (CY) Section 500	316.00	528.99	167.1608	8.00	1337.29	1.50	250.74	Class A Concrete
Class __ Concrete (CY) Section 500				8.00		1.50		
Class __ Concrete (CY) Section 500				8.00		1.50		
Superstru Con Class __ (CY) Section 500				8.00		1.50		
Superstru Con Class __ (CY) Section 500				8.00		1.50		
Superstru Con Class __ (CY) Section 500				8.00		1.50		
Concrete Handrail (LF) Section 500				8.00		1.50		
Concrete Barrier (LF) Section 500				8.00		1.50		

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
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Stru Steel Plan Quantity (LB) Section 501				8.00		1.50	
Stru Steel Plan Quantity (LB) Section 501				8.00		1.50	
PSC Beams (LF) Section 507				8.00		1.50	
PSC Beams (LF) Section 507				8.00		1.50	
PSC Beams (LF) Section 507				8.00		1.50	
Stru Reinf Plan Quantity(LB) Section 511				8.00		1.50	
Stru Reinf Plan Quantity(LB) Section 511				8.00		1.50	
Bar Reinf Steel (LB) Section 511	37167.00	0.91	33.8220	8.00	270.58	1.50	50.73
Piling inch (LF) Section 520				8.00		1.50	
Piling inch (LF) Section 520				8.00		1.50	
Piling inch (LF) Section 520				8.00		1.50	
Piling inch (LF) Section 520				8.00		1.50	
Piling inch (LF) Section 520				8.00		1.50	
Piling inch (LF) Section 520				8.00		1.50	
Drilled Caisson (LF) Section 524				8.00		1.50	
Drilled Caisson (LF) Section 524				8.00		1.50	
Drilled Caisson (LF) Section 524				8.00		1.50	
Pile Encasement (LF) Section 547				8.00		1.50	
Pile Encasement (LF) Section 547				8.00		1.50	

SUM QF DIESEL=	2654.76	SUM QF UNLEADED=	606.79
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DIESEL PRICE ADJUSTMENT(\$)	\$6,918.05
UNLEADED PRICE ADJUSTMENT(\$)	\$1,264.44



## ASPHALT CEMENT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT(Surface Treatment 125% MAX)

*APPLICABLE TO CONTRACTS CONTAINING THE 413 SPEC. SECTION 413.5.01 ADJUSTMENTS ASPHALT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT*

<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

ENTER APL

ENTER APM

**MISSING APL OR APM**                      **MISSING APL OR APM**

Use this side for Asphalt Emulsion Only		
L.I.N.	TYPE	ASPHALT EMULSION (GALLONS)
TMT =		<input type="text"/>
REMARKS:		

Use this side for Asphalt Cement Only		
L.I.N.	TYPE	TACK (GALLONS)
TMT =		<input type="text"/>
REMARKS:		

**MONTHLY PRICE ADJUSTMENT(\$)**                      **MISSING APL OR APM**

### ADJUSTMENT SUMMARY

FUEL PRICE ADJUSTMENT ( <i>ENGLISH 125% MAX</i> )	
DIESEL PRICE ADJUSTMENT(\$)	<u>\$6,918.05</u>
UNLEADED PRICE ADJUSTMENT(\$)	<u>\$1,264.44</u>
ASPHALT CEMENT PRICE ADJUSTMENT (BITUMINOUS TACK COAT 125% MAX)	<u>\$201.78</u>
400 / 402 ASPHALT CEMENT PRICE ADJUSTMENT 125% MAX	<u>\$8,147.28</u>
ASPHALT CEMENT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT(Surface Treatment 125% MAX)	<u>MISSING APL OR APM</u>

REMARKS:	
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**TOTAL ADJUSTMENTS**                      **\$16,531.55**